

In the Abstract

Please delete the Abstract as presented in the underlying International Application No. PCT/DE2003/002568 and replace it with the following new Abstract:

ABSTRACT

A membrane module for the separation of hydrogen is configured for parallel flows and contains a plurality of planar membrane cells which respectively comprise two hydrogen-selective planar membranes respectively surrounded by a flat membrane frame. An air-permeable distancing layer is arranged between the membranes for removal of the permeate gas and a supply frame surrounding a supply area for the reformat gas. All membrane frames and supply frames have the same outer dimensions and form a stack with planar side surfaces. Two membrane frames of each membrane cell have protruding edges directed towards each other, enabling them to enter into contact with each other, except for at least one first opening towards a side surface of the stack. The supply frame is disposed, except for second and third openings towards the side surfaces of the stack, in a closely adjacent manner to the edges of the membrane frame of two neighboring membrane cells. The outsides of all membrane frames and supply frames, except for first, second and third openings, are welded or soldered to each other in a gas-tight manner.